Preventing Overexposure to Hazardous Substances Through Respirator Certification

WHAT IS THE PUBLIC HEALTH PROBLEM?

- When engineering and other controls do not reduce exposures below hazardous levels, workers must use personal protective equipment as a condition of employment. Industries that often require workers to use such equipment include mining, fire fighting and other emergency response, health care, and agriculture.
- People who respond to hazardous incidents or terrorist activities need assurance that the protective equipment they use will perform to specifications and meet minimum performance standards.

WHAT HAS CDC ACCOMPLISHED?

CDC conducts a respirator certification program that ensures respiratory protective equipment will perform to established minimum standards. The program assesses the ability of the equipment's design to meet regulatory performance and quality standards. Since 1972, CDC has issued more than 7,600 approvals, 222 of which were issued within the last year. In FY2002, CDC processed 379 certification applications for respirators produced by 63 manufacturers in 85 sites located in 18 countries. Fifty-eight product audits were completed. Eighteen respirator manufacturing sites were audited, including four foreign sites. Fifty reports of problems with CDC-approved respirators were received and 29 related investigations were completed; four of these investigations led to product recalls or field retrofit actions. Two certifications were revoked. Five new policies were developed and implemented to assess new and innovative respirator designs. Approximately 5 million workers use CDC-certified respirators.

Examples of program in action:

- During FY2002, CDC was involved in the certification of self-contained breathing apparatus (SCBA) for use by emergency responders in incidents involving chemical, biological, radiological, or nuclear (CBRN) warfare agents. The first CBRN SCBA approval was issued on May 31, 2002.
- CDC also partnered with the Bureau of Labor Statistics and conducted a survey of 40,000 private U.S. industry establishments on respirator use and practices. Survey results will be used to develop new recommendations for the occupational use of respirators and to design new research projects to improve the effectiveness of respirators.

WHAT ARE THE NEXT STEPS?

CDC currently is developing new requirements for air-purifying CBRN respirators and air-purifying CBRN escape respirators. CDC also is developing a new computer system that will aid the respirator approval process by managing, tracking, processing, and maintaining approval records.

For additional information on this and other CDC programs, visit, www.cdc.gov/programs. *February 2003*